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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,828	07/10/2001	Darren Kenneth Rogers	1368 CIP (Touchstone)	9834

7590

06/11/2003

McGuire Woods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102

EXAMINER

MEDLEY, MARGARET B

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 06/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/902,828	Applicant(s) ROGERS, DARREN KENNETH	
	Examiner Margaret B. Medley	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18, 19 and 21-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 19 and 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) ✓ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>16</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This office action is in response to Paper No. 18 dated March 4, 2003.

The amendment to page 1 of the specification has been entered of record. The cancellation of claims 1-17 and 20, the amendments to claims 18 and 19 and the newly added claims 21-38 have been entered of record. The pending claims of record are claims 18, 19 and 21-38.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-19 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Harnett 3,309,437 in view of Koppelman 4,127,391 combined with Madley et al (Madley) GB 1,489,690 and Kirk-Othmer for reasons made of record at pages 4-5 in Paper No. 10 dated September 4, 2002.

Claims 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harnett 3,309,437 in view of Koppelman 4,127,391 combined with Madley et al (Madley) GB 1,489,690 and Kirk-Othmer.

Harnett teaches a porous based product having compressive strength typically in excess of 5,000 psi (note column 4, lines 1-9) when heated or calcined to 950⁰ C and an apparent density of 0.93 g/cc (note Table 1 for Examples 4 and 5) and further graphitizing (note column 5, lines 20-44). The apparent density of 0.93 g/cm of patentees

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is rendered obvious by the predetermine or apparent density of 0.1 and about 0.6 g/cm³ of applicants. It is the examiner's position that "about 0.8 g/cm³ suggests the instant claimed 0.6 g/cm³.

Harnett is silent to the coal based product and that the coal based have a free index swell of between about 3.5 and about 5.0, and that the foam have a thermal conductivity below @ 1 W/mK.

It would be obvious to the artisan in the art to use a coal based product as the starting material for the coke product in view of Koppelman and a coal with swelling index between 3 and 9 in view of Madley and Kirk-Othmer.

Koppelman teaches coke produced from bituminous coal, column 1, lines 17-68, Examples 1-2 and the Table at column 11. It is the examiner's position that since coke is produced from coal, it is a coal base product. The teachings of Koppelman clearly teach the artisan to use a coal-based product as the starting material of Harnett.

Patentees Madley teaches the artisan in the art that by varying the pretreatment conditions, e.g., temperature and reaction time, the swelling properties of a specific coal can be controlled to a substantial degree for the subsequent use of the coal in further process step, note page 1, lines 69-75. Madley further teaches a coal having a swell index of 3.5 which encompass the about 3.5 and about 5.0 range, note Madley the example on page 2, lines 32 to 40.

The Kirk-Othmer article teaches the artisan in the art that it is state of the art knowledge that best cokes come from coals having swelling indexes between 4 and 9, the last paragraph on page 455 of Vol. 6. The article further discloses application of Coal Petrology and Petrography, pages 429 to page 434 of Vol. 6, particularly figure 3 at page

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431 for swelling indexes of coal and Table 4 for the coal classification. It would be obvious to the artisan in the art to use the bituminous coal of Koppelman and particularly a coal having 3.5-9 swell index of the secondary references as the starting material coal of the primary reference having a swell index of between 4 and 9 to produce the best coke.

It is the examiner's position that the coal foam and method of Harnett would have a thermal conductivity below @ 1 W/mK property that would be inherent when the selected coal is bituminous further rendering the claims obvious.

Applicant's arguments filed March 4, 2003 have been fully considered but they are not persuasive.

Koppelman is relied on for providing the motivation to substitute coal particles for the petroleum coke of Harnett.

The instance claims pressure range of below about 500 psi is rendered obvious by Harnett teaching that the container contain inert gases to avoid oxidation of the body produced, column 2, lines 36-55. The teachings that also the containers substantially closed at the top and possessing only small size vent openings may sometimes be used in order to minimize oxidation of the bodies being produced column 2, lines 56-59 clearly indicates that Harnett contemplate vacuum closed reactors.

Madley and Kirk-Othmer are maintained for their teachings for the various properties of coal, prior to and after heat treatment as discussed in the rejection previously made of record and the supra rejection. The prior art is properly combined as discussed in the supra rejection and the instant claims are rendered obvious.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret B. Medley whose telephone number is 703-308-2518. The examiner can normally be reached on Monday-Friday from 7:30 am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

M. B. Medley/mn
June 10, 2003


MARGARET MEDLEY
PRIMARY EXAMINER